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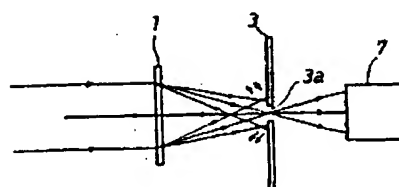
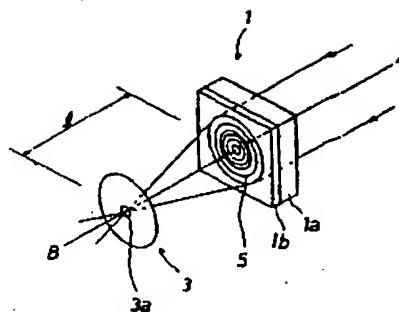
APPLICATION DATE : 26-02-87
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APPLICANT : NIPPON DENSO CO LTD;

INVENTOR : MATSUI KAZUMA;

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TITLE : WAVELENGTH SELECTIVE
CONDENSER



ABSTRACT : PURPOSE: To detect light with specific wavelength in a specific direction with high sensitivity by providing a hologram which has the function of a convex lens or concave mirror and a pinhole formed in an optical path of light transmitted or reflected by the hologram.

CONSTITUTION: This condenser has the hologram 1 which has the function of the convex lens or concave mirror and the pinhole 3a formed in the optical path of light transmitted or reflected by the hologram. A shield plate 3 is at a distance (l) from a hologram lens 1 and the position of its focus is coincident with the part of the pinhole 3a. The light with the specific wavelength in light in a direction A which is the specific direction where diffraction is caused is focused at the distance (l) and almost all of the light passes through the pinhole 3a and exits. The remaining wavelength light even when traveling straight in the hologram lens 1 or diffracted is converged on a position distance from the position of the pinhole 3a, so it can not pass through the shield plate 3. Only the specific-wavelength light exits in a direction B, so a photosensor 7 is provided at the position to accurately select and measure the specific wavelength in the specific direction by a photodetector for specific wavelength.

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